TABLE V-22

Dose to Individual Drinking River Water and/or Eating Fish after Runoff from Decontaminated Salt Tanks Damaged by an Earthquake $^{\alpha}$

Nitrate-Nitrite Concentrations

0.027% EPA drinking water limit

Mercury Concentrations

0.13% EPA drinking water limit

Individual Whole Body Dose,
Drinking Water

0.17 mrem/yr

Individual Bone Dose, Drinking Water

0.08 mrem/yr

Individual Whole Body Dose, Eating Fish b

11 mrem/yr

Population Dose Risk over 105-Year Period^c

7.2 man-rem

- b. Assumes this individual eats 25 pounds of fish per year. The present commercial fishing industry could supply about 200 such people.
- c. Based on a probability of 10⁻³/yr for an earthquake of intensity of MM IX which is required to damage the tanks containing salt. Assumes 25% of the tanks are damaged. Estimates show that 100 years are required for rainwater entering the tanks to dissolve the salt and empty the tanks. Also assumes the population drinking water and eating fish caught commercially increases by a factor of 5 during the period.

a. Assumes the amount of residual radioactivity in the tanks after decontamination is equal to or less than the radionuclide content of the salt and that 10% or less of the residual activity is transferred to the salt. Also assumes 25% of the tanks containing salt are damaged and 10% of the salt and radionuclides released from the tanks reach the river.